

Abstract

A method and system to detect a position of a member movable along a defined path is described. The system includes a magnetic source, an array of sensors, and an analyzer. The magnetic source radiates a magnetic field and is coupled to a movable member. The array of sensors is fixed relative to the movable member. Each sensor generates an output response value based on an angle of the magnetic field passing through each sensor. The array of sensors produces a plurality of output response values for a first position of the movable member. The analyzer receives the plurality of output response values and calculates a composite output response value to determine the first position of the movable member.